Journal of Early Intervention

http://jei.sagepub.com

Participation in Inclusive Preschool Programs and Sensitivity to the Needs of Others

Karen E. Diamond and Ellen S. Carpenter Journal of Early Intervention 2000; 23; 81 DOI: 10.1177/105381510002300203

The online version of this article can be found at: http://jei.sagepub.com/cgi/content/abstract/23/2/81

Published by: \$SAGE Publications http://www.sagepublications.com

On behalf of:



Division for Early Childhood of the Council for Exceptional Children

Additional services and information for Journal of Early Intervention can be found at:

Email Alerts: http://jei.sagepub.com/cgi/alerts

Subscriptions: http://jei.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations (this article cites 25 articles hosted on the SAGE Journals Online and HighWire Press platforms): http://jei.sagepub.com/cgi/content/refs/23/2/81

REGULAR ARTICLES

Participation in Inclusive Preschool Programs and Sensitivity to the Needs of Others

KAREN E. DIAMOND

Purdue University

ELLEN S. CARPENTER

Appalachian State University

This study examined how children's ideas about a prosocial behavior, helping, are related to their experiences in an inclusive preschool. Thirty three preschool children enrolled in inclusive classes, and 30 children enrolled in early childhood classes for typically developing children only participated in the study. Children's ideas about helping were elicited in interviews. In addition, preschool teachers rated each child's prosocial behaviors. Results revealed that children in inclusive classes received statistically significantly higher helping strategy scores and were statistically significantly more likely to refer to disability in their responses than children in early childhood classes for typically developing children only. These results are consistent with previous work, and suggest that young children are capable of sensitivity to the needs and competencies of children with disabilities. Implications for classroom practice are offered.

It is increasingly common for young children with disabilities to be enrolled in community-based programs including Head Start, public school prekindergartens, child care, and preschool programs. Not only do preschool children with disabilities participate in a variety of programs in their communities, Wolery and his colleagues have found that the proportion of early childhood programs that included children with disabilities increased from 37% to 74% over the period from 1986–1990 (Wolery et al., 1993).

The impetus to provide special education for young children in settings that include normally developing peers has been supported by moral, legal and educational rationales (Bailey, McWilliam, Buysse, & Wesley, 1998). A moral rationale that has been offered in support of inclusive practices is that children with disabilities have a right to a life as normal as

possible (Bricker, 1978; Stainback & Stainback, 1992). This rationale has been interpreted to include participation in the same high-quality programs that are provided for children without disabilities, along with participation in class activities and in positive relationships with individual class members. The Individuals with Disabilities Education Act (IDEA) and the Americans with Disabilities Act offer legislative and legal support for inclusion. Educational rationales for inclusion have typically focused on the developmental benefits of inclusion for children with disabilities, including providing a more challenging and socially responsive learning environment with opportunities to learn from more competent peers (Bricker, 1978).

Little attention has been given to the benefits that might accrue for children without disabilities who are enrolled in inclusive preschool programs. There is some evidence that normally developing preschool children enrolled in inclusive classes learn about what it means to have a disability (Diamond, Hestenes, Carpenter & Innes, 1997) and develop an increased sensitivity and responsiveness to others (Peck, Carlson, & Helmstetter, 1992). In the study conducted by Diamond and her colleagues, children enrolled in inclusive programs had a better understanding of the longterm consequences of physical and sensory disabilities than did children enrolled in early childhood programs for typically developing children only. Diamond and Hestenes (1994) also found that children developed a more complete understanding of hearing, deafness, and sign language when they were enrolled in a class with a hearing impaired classmate who used sign language with his teachers. Esposito and Reed (1986) reported that contact with age-mates with disabilities was associated with long lasting positive gains in young children's attitudes toward people with disabilities.

In a study of parents' and teachers' beliefs about inclusive preschool programs, Peck and his colleagues found support for the idea that inclusive programs provide important social benefits for children without disabilities. Parents and teachers reported that participation in an inclusive early childhood program fostered an acceptance of diversity and the development of children's sensitivity and responsiveness to others. In their study, parents reported that their young, normally developing children who were enrolled in inclusive preschools displayed less prejudice and fewer stereotypes, and were more responsive and helpful to others, than they would have been without this experience (Peck et al., 1992). In another study, general education teachers reported that children and adolescents without disabilities became increasingly aware of the needs of others when they were enrolled in a class that included a child with a severe disability (Giangreco, Dennis, Coninger, Edelman, & Schattman, 1993).

In studies with older children, Helmstetter, Peck, and Giangreco (1994) reported positive outcomes of inclusion for high school students who participated in programs with age-mates with disabilities, and Kishi and Meyer (1994) found that teenagers' attitudes were more positive and accepting of people with disabilities if they had participated in mainstreamed school-based activities during elementary school. When normally developing high school students were asked about the ways in which their interactions with peers with disabilities had affected their lives, they reported seven different types of positive outcomes, including increased responsiveness to others' needs (Helmstetter, et al., 1994). These positive outcomes are similar to those reported by parents and teachers of preschool children enrolled in inclusive early childhood programs. Positive outcomes reported by these high school students were more likely to occur when they had more opportunities for sustained contact and interaction with age-mates with disabilities. In these studies, typically developing children's increased responsiveness to the needs of others was identified by parents, teachers, and adolescents as an important outcome of regular interactions at school with peers with disabilities. We have found no comparable research with preschool children that examines the influence of participation in a setting that includes age-mates with disabilities on children's responsiveness to others. This is the focus of our study.

Important to the development of children's prosocial behaviors is their awareness of, and responsiveness to, others. Prosocial behavior has been defined as "voluntary action intended to aid or benefit another" (Holmgren, Eisenberg, & Fabes, 1998, p. 169) and includes behaviors such as sharing, helping, supporting, and protecting others. We focus on helping behavior in our research, in part because others have found that young children find helping peers with disabilities to be a "natural, pleasant experience" (Grenot-Scheyer, Staub, Peck, & Schwartz, 1998, p. 153). In addition, from the child's perspective helping does not necessarily require that the child 'give up' resources to another child. Factors that have been implicated in the development of helping behaviors include cognitive factors, such as empathy and role-taking ability (Eisenberg & Miller, 1987) and family factors (Richman, Berry, Bittle, & Himan, 1988). Children as young as 18 months of age have been observed to offer help or assistance to others (Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Naturalistic observations in preschool classrooms that do not include children with disabilities suggest that most children provide assistance to their peers, although the frequency of providing help varies from child to child and from study to study. Iannotti (1985), in an observational study of naturally occurring prosocial events in preschool classrooms, found that the majority of cooperative and sharing acts were in response to the request of another child or teacher, while most helping behaviors occurred spontaneously. There also was anecdotal evidence that children understood the feelings of others, were aware of another child's need for assistance, and acted on that information.

While the research described above examined the likelihood that children would offer assistance when given the opportunity to do so, Stockdale, Hegland and Chiaramonte (1989) examined naturally occurring prosocial behaviors during free play in preschool. They found that helping opportunities occurred relatively infrequently and that children were most likely to help when they were asked to do so by the teacher. Similarly, Caplan and Hay (1989) reported that only 11% of episodes of distress they observed in preschool classrooms elicited a prosocial response from a peer. They suggested, however, that teachers typically responded quickly to a child's distress, thereby leaving few opportunities for children to respond. Follow-up interviews about specific distress episodes revealed that although most children (71%) offered at least one strategy for intervening, 92% of children said it was the teacher, not the child, who was "supposed to help". More recently, Diamond, Cooper and Keim (1997) found that children in inclusive classes often described the role of therapist or paraprofessional aide as that of a 'helper' for a classmate with a disability.

The study presented here examines the ways in which children's ideas about helping others (primarily people with disabilities) are

associated with their participation in an inclusive preschool class. We focused primarily on children's ideas about helping, rather than helping behaviors in the classroom, because previous research suggests that while preschool children often have ideas about how they might help in specific situations, actual opportunities for helping may be limited (Caplan & Hay, 1989). In addition, opportunities to help a classmate may not be equally distributed across different classes of young children. Radke-Yarrow, Zahn-Waxler, and Chapman (1983) suggested that children learn prosocial behaviors, such as helping, by observing and modeling others. If observing and modeling, however, are components in children's learning of prosocial behaviors, one would expect that children in inclusive preschool classes have more ideas about, and strategies for, helping others (especially classmates with disabilities) than peers in preschool classes with typically developing children only. Thus, we hypothesized that children enrolled in inclusive preschool classes would (a) have more knowledge about strategies for helping others, particularly people with disabilities, and be more sensitive to the presence of a child's disability, and (b) receive higher ratings of prosocial behavior from their teachers, than children in preschool classes with typically developing children only. Because others have found gender differences in young children's prosocial behaviors (Burford, Foley, Rollins, & Rosario, 1996), we hypothesized that girls would receive higher prosocial behavior ratings than boys, regardless of their preschool experience.

METHOD

Participants. Participants were recruited from two community child care programs serving children 2 to 6 years of age. The first was a full-inclusion program (3 classes) in which children with and without disabilities participated in the same classes throughout the day. Intervention services were provided for children with disabilities within the context of ongoing classroom activities. The second was a child care program with three classes and no

children with disabilities enrolled at the time of the study. Letters of invitation describing the research, along with consent forms, were sent home with the parents of all English-speaking 3- to 6-year-old children enrolled in these classes (N = 97); 68% of all eligible children were given permission to participate in this study. Two children declined to participate and one child moved from the community during the study.

Participants were 33 preschool children (11 females) between the ages of 42 and 69 months (M = 60, SD = 6.9) who were enrolled in inclusive classes, and 30 children (18 females) between the ages of 42 and 68 months (M = 56, SD = 8.1) enrolled in preschool classes with typically developing children only. The ethnic background of the children, which was comparable across the two centers, was as follows: Caucasian (90%), Asian (5%), and African-American (5%). Initial analyses revealed that children in inclusive classes were statistically significantly older, t(61) = -2.6, p < .01, and were more likely to be boys χ^2 (1) = 4.5, p < .05, than children in preschool classes with typically developing children only. Consequently, age was included as a covariate and gender was included as a between-subjects variable in all analyses.

Setting. In the inclusive classes, 15% -20% of the children had been identified by the local school district as having a disability that required an IEP. In Classroom 1, there was one child with expressive language delay, one child with mental retardation, and one child with a limb deformity that interfered with fine-motor tasks. Classroom 2, had a child with moderate-severe hearing loss and a child with a physical disability that required the use of braces and a walker. Classroom 3 included a child with limited vision, a child with a physical disability that required the use of a wheelchair, and one child with mental retardation. In both centers, class size ranged from 14-20 children. Both programs followed the National Association for the Education of Young Children developmentally appropriate practices guidelines (Bredekamp & Copple, 1997). Inclusive classes were organized for child-initiated and child-directed activities, with children's individual goals embedded within these activities (see Bricker, 1998). Specialized interventions occurred as part of classroom activities (e.g., mobility training in the classroom and on the playground). Teachers included all children in small- and large-group activities, but there were no specific interventions targeted at helping children to become more aware of disabilities, social interactions, or strategies for helping others. Data were collected in the spring of the school year, and all children had been enrolled in their class for at least 3 months prior to data collection.

Procedures

Each child participated in one interview session with the second author. Each interview lasted approximately 20 minutes and was completed in a small room away from the child's classroom. Teachers were given copies of the prosocial rating measure, and they were asked to complete one measure for each participating child.

Measures

Helping interview. This interview consisted of eight short vignettes adapted from Rubin's Social Problem Solving Task-Revised (1988). It was designed to explore children's ideas about the strategies that they might use to help another child. The eight vignettes (helping stories) included two vignettes about a child with a physical disability, two about a child unable to see, two about a child unable to hear, and two about a child without a disability. The disabilities used in the vignettes were selected because research suggests most preschool children have a basic understanding of physical and sensory disabilities (Conant & Budoff, 1983; Diamond, Hestenes et al., 1997), regardless of their experiences with people with disabilities. Each vignette had a male and female version.

In order to provide additional cues about the meaning of each disability, small dolls that were the same gender as the subject were used with the vignettes. As recommended by others (e.g., Denham, 1986, Ramsey, 1988) dolls

84 *JEI*, 2000, 23:2

were used in order to provide a familiar medium that both lessened processing demands and increased the contextual validity of the measures. One doll was modified to represent a child with a physical disability (using a wheelchair), another to represent a child with a hearing loss (with hearing aids and an auditory trainer), and a third to represent a child with a vision impairment (eyes without definition between pupil and iris). A fourth doll was not modified, and represented a child without a disability. Every effort was made to ensure that the adaptations were representative of the disability, although there was not necessarily a child with that disability in the preschool program. Because the focus of the interview questions was on the child's ideas about helping and not on the disability per se, the disability of each doll was described to the child at the time the doll was introduced (e.g., "Let's pretend this doll is real. His name is Paul. Paul's eyes look different because they don't work. He can't see.").

Vignettes were presented in random order and following each vignette, the child was asked, "What will happen next?" If the child answered that s/he would help, but offered no specific strategy for helping, the interviewer asked, "How would you help?" If the child did not spontaneously offer an idea about helping, the interviewer prompted the child to think of ways to help by asking, "Is there something you could do?" If the child simply responded "yes," the child was asked to describe what he or she might do. (Copies of vignettes can be obtained by writing the first author.) After completing all the helping vignettes, the child was asked why he or she helped other children, and why other children might help others. Children's responses were recorded verbatim, with audiotaping used to verify the written record.

Teacher Questionnaire. The prosocial behaviors of children were assessed with the Prosocial Behavior Questionnaire (Weir & Duveen, 1981), a 20 item list of statements that described prosocial classroom behaviors for each child in the study. This questionnaire was completed independently by the classroom teacher and assistant teacher. Teachers

were asked to base their responses on their observations, and to complete each questionnaire on their own. This measure is reported by the authors to have adequate test-retest reliability (r=.91) and validity. Ratings of the teacher and assistant teacher were significantly correlated (r=.47, p < .01), and a mean score (based on teacher and assistant teacher ratings) was computed for each child.

Data Reduction. Children's helping strategies were coded using a scheme adapted from Costin & Jones, 1992. Coding of all of the interview transcripts was completed independently by two coders who were blind to the enrollment status (inclusive class, preschool class with typically developing children only) of the child. Agreement was reached for 97% of interview questions, with disagreements resolved through discussion. Responses were coded 1 if the child gave no response, or said I don't know, 2 for a strategy not appropriate to story (e.g., offering to share in a story that required helping) or an unelaborated helping response (e.g., "I would help him"), and 3 for an appropriate helping strategy. For each child, a mean strategy score was calculated. Scores could range from 1 to 3.

In addition to coding children's helping strategies, we also devised a disability reference score based on children's specific reference to a disability. If the child's response made an explicit reference to the doll's disability or the disability related equipment (e. g. wheelchair, auditory trainer), a disability reference score of 1 was given. A disability reference score of 0 was given for responses that made no reference to the disability. For example, if a child responded "I'd tell her to go," after hearing the story about a child with a hearing loss, a disability reference score of 0 would be given. If the response, however, was "I'll get close to her and look at her and tell her it's time to go out. I can use my hands to tell her," the disability reference score would be 1. Scores across the six disabilityrelated vignettes were totaled to create a summed disability reference score. The potential range of this score was 0 to 6. Two coders, blind to participants' enrollment status, independently coded responses to all vignettes,

Table 1.

Mean strategy scores for children in inclusive classes and preschool classes with only typically developing children.

	Inclusive $N = 33$	Typically Developing $N = 30$
Helping strategy score	$M=2.91^{\rm a}$	$M=2.67^{\rm a}$
	SD = .22	SD = .48
Disability reference score	$M=2.12^{\rm b}$	$M = 1.0^{6}$
-	SD = 1.32	SD = 1.05

p < .05p < .01

with agreement for 96% of items. Disagreements were resolved through discussion.

Categories for describing children's motives for helping were created inductively by two coders working independently. First, each coder developed categories he or she felt best represented the range of children's responses to questions about why they help. Then, coders met with the second author to discuss categories until mutually agreed-upon categories emerged. Finally, six categories were defined: (a) helping because one is told to do so, (b) helping to gain a reward, (c) helping because the person is my friend, (d) helping because my friend helps me, (e) it is nice to help, and (f) no response or "I don't know". Children's responses were coded by two coders working independently. Agreement on 94% of the responses was reached and disagreements were resolved through discussion.

RESULTS

Our first hypothesis was that children enrolled in inclusive preschool programs would have more knowledge about strategies for helping people, particularly people with disabilities, and they would be more sensitive to a child's disability, than children enrolled in preschool classes with typically developing children only. We used multivariate analysis of covariance (MANCOVA) to test this hypothesis. The dependent variables for this analysis were the helping strategies score and disability reference score. Classroom type (inclusive class or preschool class with typically developing children only) and gender were between-sub-

jects independent variables; age was entered as a covariate. Using Wilk's Lambda criterion, the combined dependent variables were statistically significantly affected by classroom type $(\lambda = .78, F = 7.84, df = 2, 56, p < .001)$ but not by gender (F = .42, p = ns). Children in inclusive classes had statistically significantly higher helping strategies scores (F = 3.91, p < .05) and disability reference scores (F = 13.4, p < .001) than children in preschool classes with typically developing children only. Group means are shown in Table 1 and examples of strategies children offered for helping peers with different disabilities are provided in Table 2.

Our second hypothesis was that children in inclusive classes would receive higher ratings of prosocial behavior from their teachers than children enrolled in preschool classes for only typically developing children. We also hypothesized that girls would receive higher prosocial behavior ratings than boys, regardless of their preschool experience. We examined differences in teachers' ratings of children's prosocial behaviors for children enrolled in inclusive preschool classes and preschool classes for typically developing children only using a 2 (classroom: inclusive, typically developing children only) by 2 (gender) ANCOVA with age as a covariate. There were statistically significant main effects of classroom (F = 20.9, df = 1, 58, p < .0001) and gender (F = 26.2, df = 1, 58, p < .0001) but no significant classroom by gender interaction (F =0.19). Teachers rated children in inclusive programs as statistically significantly more pro-

Examples of vignettes and children's helping strategic	es

Orthopedic disability: "Laura uses a wheelchair because she can't walk. She is painting at the easel. You are standing nearby. Laura drops her paint brush and can't reach it."

Examples of vignettes

Vision impairment: "Paul has trouble seeing lots of things. He sometimes trips over things that he can't see. He is playing outside on the playground. It is time to go in and as Paul walks toward his class there is a wagon in the way. You are standing next to the wagon."

Hearing impairment: "Sara uses a special hearing aid, because she can't hear very well. The bell rings for a fire drill. All of the other children go to stand by the door. You notice that Sara is still playing in the playhouse. She is not getting ready to leave the room."

No disability: "Mark is helping to put the toys away. The toys go on the shelf behind the closet doors. Mark's hands are full of toys and he can't open the doors. You are standing close by."

Examples of helping strategies

- I'll help her. I'll pick it up.
- I'll pick up her paint brush for her.
- I'll say, "I'll get that for you."
- I'll get that thing out of the way 'cause he can't see it, and then he can walk ok.
- I'll move the wagon.
- I'll shout at him and tell him to watch out.
- I could turn her around and hold her arm and go outside with her.
- I'll grab Sara and turn her around and take her to the door.
- I'll get close to her and look at her and tell her it's time to go out. I can use my hands to tell her.
- I could open the door so he could put them
- I'll help him hold the toys.
- I'll say, "You have a lot of toys. I'll take some," and he'll say "thank you."

social than children in classes with typically developing children only, and girls received higher prosocial ratings than did boys (see Table 3). Because individual teachers rated the children in their classes, there is no way to insure comparability in teachers' ratings across classes (i.e., that two teachers in different classes would rate the same behaviors in the same way). As one way to address the issue of reliability of teachers' ratings, we examined the relationship between teachers' ratings and children's helping scores using correlation analysis. Results of this analysis revealed that teachers' scores were statistically significantly correlated with children's helping strategy scores (r = .35, p < .01).

Finally, we explored the reasons children offered for helping. Almost half of the children in each program referred to friendship as the primary reason for helping another child (e.g., "Kids help because they are friends."). Children also referred to external demands (e.g., "I help because the teacher says I have to"), intrinsic rewards for themselves (e.g., "I

Table 3. Prosocial behavior ratings for children in inclusive classes and classes with typically developing children only

	Inclusive		Typically Developing	
	Boys	Girls	Boys	Girls
Prosocial rating	N = 22	N = 11	N = 12	N = 18
	M = 3.67	M = 4.34	M = 2.93	M = 3.72
	SD = .58	SD = .25	SD = .61	SD = .55

help kids because I like to do it") and positive outcomes for the child being helped (e.g., "Kids help so other kids will feel better") as explanations for helping. When a median split was performed on age, we found that a majority of older children (67%) indicated their reason for offering help was they learned to help from an adult, while this question most often elicited a response of "I don't know" from younger children (z = 2.7, p < .001).

DISCUSSION

The results of this study support the hypothesis that children in inclusive early childhood classrooms have more ideas about, and strategies for, helping others, particularly people with disabilities, than do children in classes that do not include children with disabilities. These findings are consistent with the observations of parents and teachers, as well as the reports of adolescents, that regular opportunities to interact with age-mates with disabilities are associated with increased awareness of, and sensitivity to, the needs of others (Helmstetter et al., 1994; Peck et al., 1992). These results, along with previous research, suggest that young children enrolled in inclusive classes may be more aware of specific needs of people with disabilities, and have more ideas about how they might help, than children enrolled in preschool classes with typically developing children only.

We note, however, that although we found statistically significant differences in helping strategies between the two groups of children, examination of the mean scores suggests that children from both groups were inclined to help the child in the story. Others have found that prosocial behaviors tend to emerge during the 2nd year of life (Zahn-Waxler et al., 1992) and that children enjoy the opportunity to help others (Grenot-Scheyer et al., 1998). Thus, while most young children have a variety of ideas about what they could do to help someone, children who have experiences with peers with disabilities may have more ideas about strategies they might use to help someone who has a disability.

It would not be surprising if opportunities

for helping occur more often in inclusive classes, because children with disabilities often need assistance with classroom tasks in a way that is not required for normally developing children. Thus, in inclusive settings normally developing children may have more opportunities to observe others who are helping, including adults. Children also may learn helping strategies when they comply with teachers' requests to provide assistance to a peer. In a recent study, Salisbury and Palombaro (1998) found that teachers in early elementary classrooms often asked children to provide routine assistance for their classmates with disabilities. This assistance might include pushing a wheelchair, looking at a book together during reading time, or getting materials for another child. Just as opportunities to share are emphasized in many early childhood classrooms, it may be that teachers in inclusive preschool classes provide many opportunities for children to help each other. Grenot-Scheyer and her colleagues (1998) noted that helping is a positive experience for young children, one that enhances their self-esteem and makes them 'feel good' about what they can do. To the extent that early childhood teachers recognize this as an important outcome, they may be more inclined to ask children to help each other. This is a question deserving further investigation.

In addition, we found that children in inclusive classes were more likely than other children to refer to a child's disability when suggesting helping strategies. This finding is consistent with the work of Diamond and her colleagues (Diamond, Hestenes, et al., 1997) who have reported that normally developing children in inclusive preschool programs are more aware of the competencies and difficulties of people with orthopedic and sensory disabilities than are children without these experiences. One can only speculate that children who participated in our study may have been more likely to offer strategies for helping because they recognized that the child in the vignette had a disability.

Children in inclusive classes received higher prosocial behavior ratings from their teachers than did children in preschool classes for

only typically developing children. As noted earlier, teachers rated only children in their class. This may have introduced a systematic bias to the ratings, particularly if teachers in inclusive classes felt it was socially desirable to rate their students as showing positive prosocial behaviors. The fact that teachers' ratings and children's helping strategy scores were positively correlated suggests, however, that both of these measures assessed similar behaviors. We suggested earlier that teachers in inclusive classes may provide their students with specific opportunities to help classmates with disabilities. If this is the case, then teachers also have more opportunities to observe their students' prosocial behaviors because the teacher prompted the student to perform the behavior. A majority of the older children in this study said that they learned to help from adults. Asking a child to help a classmate is one way that teachers may teach and reinforce these behaviors.

We speculate that children in inclusive classes may often come from families that value diversity in others and deliberately choose to enroll their children in classes that support diversity. Location and price, rather than specific aspects of the program, are important factors influencing parents' choice of child care centers (cf. Helburn, 1995). Although it is likely that this was also important for the families who participated in this study, the programs in which we collected data had similar tuition fees and waiting lists. Parents of children in inclusive preschool programs have reported that they value opportunities the inclusive experience provides their child (Peck et al., 1992). Recently, Okagaki, Diamond, Kontos, and Hestenes (1998) found a relationship between the frequency with which preschool children enrolled in inclusive programs played in close proximity to classmates with disabilities and parents' beliefs about the value of interacting with children with disabilities. This finding suggests a parent's beliefs and values about inclusion have an impact on their child's ideas and behaviors. Enrolling a child in an inclusive program provides parents with a way to encourage the development of prosocial behaviors they value and teach at home. If true, one would expect to find, even at the beginning of the school year, that children enrolled in inclusive classes would have noticeably more ideas about prosocial strategies, such as helping others, than would other children. In addition, these differences between children in inclusive classes and classes for only typically developing children should increase over the course of the year as a function of children's experiences at home and at school.

IMPLICATIONS FOR PRACTICE

Developing social relationships with age-mates is an important task for all children, including children with disabilities. Friendships, even among young children, are typically thought of as existing between relatively equal partners (Guralnick, 1999). Helping relationships, on the other hand, are inherently hierarchical and unequal, particularly when one partner (a normally developing child) is typically in the role of the helper, providing assistance to another (a child with a disability). Thus, some would argue that when one child consistently provides assistance to another child, these children are not friends because of the inherent inequality in their relationship.

We argue, however, that helping others is a prosocial behavior that leads to cooperation and ethically responsive behavior (Stanhope, Bell, & Parker-Cohen, 1987). Furthermore, helping others benefits the child who is providing the assistance as well as the child being helped. Indeed, parents report increased sensitivity to the needs of others is an important outcome of their child's participation in an inclusive preschool program (Peck et al., 1992). Children enjoy the opportunity to help each other, and learning how and when to help, and when to allow another child to try a task independently are skills children can learn at school while experiencing the mutual pleasure of social contact with peers. To the extent that children learn about helping by watching and modeling adults, it is critical that adults (e.g., teachers, paraprofessional aides, therapists, consultants) in the classroom think about these issues when providing support and assistance for a child with a disability. Others have shown that children in inclusive classes become sensitive to the ways in which specific types of disabilities may (or may not) affect children's participation in specific preschool activities (Diamond, Hestenes, et al., 1997). We suggest that ways in which children learn to help each other within the context of a supportive, pleasurable social relationship also can be learned in inclusive settings.

REFERENCES

- Bailey, D. B., McWilliam, R. A., Buysse, V., & Wesley, P. W. (1998). Inclusion in the context of competing values in early childhood education. Early Childhood Research Quarterly, 13, 27-47.
- Bredekamp, S. & Copple, C. (1997). Developmentally appropriate practice in early childhood programs. Washington, D.C.: National Association for the Education of Young Children.
- Bricker, D. (1978). A rationale for the integration of handicapped and nonhandicapped preschool children. In M. Guralnick (Ed.), Early intervention and the integration of handicapped and nonhandicapped children (pp. 3-26). Baltimore: University Park Press.
- Bricker, D. (1998). An Activity-based Approach to Early Intervention. (2nd ed.). Baltimore, MD: Paul Brookes.
- Burford, H. C., Foley, L. A., Rollins, P. G., & Rosario, K. S. (1996). Gender differences in preschoolers' sharing behavior. *Journal of Social Behavior and Personality*, 11, 17-25.
- Caplan, M. Z., & Hay, D. F. (1989). Preschoolers' responses to peers' distress and beliefs about bystander intervention. *Journal of Child Psychology and Psychiatry*, 30, 231-242.
- Conant, S., & Budoff, M. (1983). Patterns of awareness in children's understanding of disabilities. Mental Retardation, 21(3), 119-125.
- Costin, S. E., & Jones, D. C. (1992). Friendship as a facilitator of emotional responsiveness and prosocial interventions among young children. *Developmental Psychology*, 28, 941–947.
- Denham, S. (1986). Social cognition, prosocial behavior and emotion in preschoolers: Contextual validation. *Child Development*, 57, 194–201.
- Diamond, K. E., Cooper, D., & Keim, S. (1997, December). Children's perspectives on their own inclusive preschool class. Presented at the International Early Childhood Conference on Children with Special Needs, New Orleans, LA.

- Diamond, K. E., & Hestenes, L. L. (1994). Preschool children's understanding of disability: Experiences leading to the elaboration of the concept of hearing loss. *Early Education and Development*, 5(4), 301–309.
- Diamond, K. E., Hestenes, L. L., Carpenter, E., & Innes, F. K. (1997). Relationships between enrollment in an inclusive class and preschool children's ideas about people with disabilities. *Topics in Early Childhood Special Education*, 17, 520-536.
- Eisenberg, N. & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 101, 91–119.
- Esposito, B. G., & Reed, T. M., (1986). The effects of contact with handicapped persons on young children's attitudes. *Exceptional Children*, 53, 224–229.
- Giangreco, M., Dennis, R., Cloninger, C., Edelman, S., & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. *Exceptional Children*, 59(4), 359-372.
- Grenot-Scheyer, M., Staub, D., Peck, C. A., & Schwartz, I. S. (1998). Reciprocity and friendships: Listening to the voices of children and youth with and without disabilities. In L.H. Meyer, H-S. Park, M. Grenot-Scheyer, I.S. Schwartz, & B. Harry (Eds.), Making friends: The influences of culture and development (pp. 149–168). Baltimore: Paul H. Brookes.
- Guralnick, M. J. (1999). The nature and meaning of social integration for young children with mild developmental delays in inclusive settings. *Journal of Early Intervention*, 22, 70–86.
- Helburn, S. (Ed.) (1995). Cost, quality and child outcomes study for children in child care programs. Technical report. Denver, CO: University of Colorado at Denver.
- Helmstetter, E., Peck, C. A., & Giangreco, M. F. (1994). Outcomes of interactions with peers with moderate or severe disabilities: A statewide survey of high school students. *JASH*, 19, 263–276.
- Hendrick, J. (1995). The whole child: Developmental education for the early years. NY: Prentice-Hall.
- Holmgren, R. A., Eisenberg, N., & Fabes, R. A. (1998). The relations of children's situational empathy-related emotions to dispositional prosocial behaviour. *International Journal of Be*havioral Development, 22, 169–194.
- Iannotti, R.J. (1985). Naturalistic and structured assessments of prosocial behavior in preschool children: The influence of empathy and perspective taking. *Developmental Psychology*, 21, 46–55.

- Kishi, G. S., & Meyer, L. H. (1994). What children report and remember: Six-year follow-up of the effects of social contact between peers with and without severe disabilities. *JASH*, 19, 277–289.
- Okagaki, L., Diamond, K., Kontos, S., & Hestenes, L. (1998). Correlates of young children's interactions with classmates with disabilities. *Early Childhood Research Quarterly*, 13, 67-86.
- Peck, C. A., Carlson, P., & Helmstetter, E. (1992).
 Parent and teacher perceptions of outcomes for typically developing children enrolled in early childhood programs: A statewide survey. *Journal of Early Intervention*, 16, 53-63.
- Radke-Yarrow, M., Zahn-Waxler, C., & Chapman, M. (1983). Children's prosocial dispositions and behavior. In P. Mussen & E. M. Hetherington (Eds.), Handbook of child psychology: Vol. 4. Socialization, personality and social development (pp. 468-545). NY: Wiley.
- Ramsey, P. G. (1988). Social skills and peer status: A comparison of two socioeconomic groups. *Merrill-Palmer Quarterly*, 34, 185–202.
- Richman, C. L., Berry, C., Bittle, M., & Himan, K. (1988). Factors related to helping behaviors in preschool-age children. *Journal of Applied Developmental Psychology*, 9, 151-165.
- Rubin, K. H. (1988). The social problem-solving test-revised. Waterloo, Canada: University of Waterloo.
- Salisbury, C. & Palombaro, M. (1998). Friends and acquaintances: Evolving relationships in an inclusive elementary school. In L.H. Meyer, H.S. Park, M. Grenot-Scheyer, I.S. Schwartz, & B. Harry (Eds.), Making friends: The influences of culture and development (pp. 81–104). Baltimore: Paul H. Brookes.
- Stainback, W. & Stainback, S. (1992). Curriculum considerations in inclusive classrooms: Facilitating learning for all students. Baltimore: Paul H. Brookes.

- Stanhope, L., Bell, R. Q., & Parker-Cohen, N. Y. (1987). Temperament and helping behavior in preschool children. *Developmental Psychology*, 23, 347-353.
- Stockdale, D. F., Hegland, S. M., & Chiaramonte, T. (1989). Helping behaviors: An observational study of preschool children. Early Childhood Research Quarterly, 4, 533-545.
- Weir, K. & Duveen, G. (1981). Further development and validation of the prosocial behavior questionnaire for use by teachers. *Journal of Child Psychology and Psychiatry*, 22, 357-374.
- Wolery, M., Holcombe, A., Brookfield, S., Huffman, K., Schroeder, C., Martin, C. G., Venn, M. L., Werts, M. G., & Fleming, L. A. (1993).
 The extent and nature of preschool mainstreaming: A survey of general early educators. *Journal of Special Education*, 27, 222-234.
- Zahn-Waxler, C., Radke-Yarrow, M., Wagner, E., & Chapman, M. (1992). Development of concern for others. *Developmental Psychology*, 26, 126–136.

This study was funded by a grant to the first author from the Agricultural Research Program at Purdue University. Portions of this work are based on a dissertation submitted to the Department of Child Development and Family Studies at Purdue University by the second author in partial fulfillment of the requirements for the degree, Doctor of Philosophy.

Authors wish to thank Linda Hestenes, Fiona Innes, Jill Billman, Julie Brown, and Becky Jenkins for their assistance with data collection and coding.

Address correspondence to Karen Diamond, Ph.D., Department of Child Development & Family Studies; Purdue University; West Lafayette, IN 47907-1267; E-mail: kdiamond@purdue.edu